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| 10/730,510   | 12/08/2003  | Jon N. Swanson       | 0920.68747                | 2343                   |
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| GREER, BURNS & CRAIN<br>300 S WACKER DR<br>25TH FLOOR<br>CHICAGO, IL 60606 |             |                      | EXAMINER<br>MIA, HASSEN A |                        |
|  |             |                      | ART UNIT<br>4131          | PAPER NUMBER           |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/730,510

**Applicant(s)**

SWANSON, JON N.

**Examiner**

Hassen A. Mia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Henrikson US Patent No. 6,894,715, (hereafter refer Henrikson) and further in view of Jang et al US Patent No.: 6,442,758, (hereafter refer Jang),

**Regarding claim 1**, Henrikson in his Mixing video signals for an audio and video multimedia conference call teaches:

Henrikson teaches, communicating a primary selection command to at least a portion of the plurality of attendees, said primary selection command designating at least one of said plurality of real time data streams communicated from at least one of the plurality of attendees as a primary stream", col. 5, lines 20 - 24, a particular participant is dominating the audio portion of the conference (206), then the primary video image that is sent to all participants is selected based on the participant dominating the audio portion of the conference call (208).

Henrikson teaches, "using said primary selection command to identify said primary data stream at said at least a portion of the plurality of attendees" col. 4, lines 49 – 52 The mixed output preferably includes and distinguishes the primary video

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image. Most preferably, media resource function 124 receives audio, video and other packets from the conference participants.

Henrikson does not specifically teach “communicating a plurality of real time data streams from each of the plurality of attendees to all others of the plurality of attendees”.

But, Jang teaches, “communicating a plurality of real time data streams from each of the plurality of attendees to all others of the plurality of attendees”, Col. 12, lines 28 – 30, in any event, the media processor card functions in real-time, to provide real-time processing of video and audio signals.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson’s systems by transmitting and receiving data in real time as taught by Jang for the purpose of timely interaction between the attendees.

**Regarding claim 2**, Henrikson teaches, “a method for communicating at least one primary data stream as defined by claim 1 wherein the step of communicating a primary selection command to at least a portion of the plurality of attendees comprises communicating said primary selection command from one of the plurality of attendees to all others of the plurality of attendees”, col. 4, lines 22 –24, the multimedia conference call preferably includes multiple participants with at least audio and video generated for some of the participants.

**Regarding claim 3**, Henrikson teaches, “a method for communicating at least one primary data stream as defined by claim 1 wherein said primary selection command designates a plurality of said plurality of data streams as primary data streams”, col. 4, lines 49 – 52 The mixed output preferably includes and distinguishes the primary video

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image. Most preferably, media resource function 124 receives audio, video and other packets from the conference participants.

**Regarding claim 4**, Henrikson teaches, "method for communicating at least one primary data stream as defined by claim 3 wherein said primary selection command includes a priority ranking for said plurality of primary data streams", col. 4, lines 24 – 28, during the multimedia conference call a primary video image is selected for display at each participant's equipment.

**Regarding claim 5**, Henrikson teaches, "a method for communicating at least one primary data stream as defined by claim 1 wherein said at least one primary data stream is a video data stream, and further including the step of at least some of said attendees displaying said primary data stream in a highlighted manner", col. 4, lines 33 – 35, the primary video image is the same size as the secondary video images, but is otherwise highlighted or distinguished for the user.

**Regarding claim 6**, Henrikson teaches, "a method for communicating at least one primary data stream as defined by claim 5 wherein the step of displaying said primary data stream in a highlighted manner comprises displaying said primary stream in a larger display size than any others of said plurality of data streams", col. 1 (background), lines 34 – 36 and supported by claim 3, col. 6 lines 49 – 51 and further by claims 9 and 14, the primary video image is larger than a plurality of remaining video images of the plurality of video images.

**Regarding claim 7**, Henrikson teaches, "a method for communicating at least one primary data stream as defined by claim 5 wherein the step of displaying said

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primary data stream in a highlighted manner comprises displaying said primary stream using a display template”, col. 4 lines, 36 – 37, The primary video image preferably corresponds to a display relating to the speaker on the videoconference, and col. 4, lines 33 – 36, a primary video image may consume 50 percent of a display or window on the user's equipment and the secondary video images may share the remaining 50 percent of the display or window.

**Regarding claim 8**, Henrikson teaches, “a method for communicating at least one primary data stream as defined by claim 7 wherein said screen display template includes a designated position for displaying said primary data stream” col. 4, lines 24 – 33, a primary video image may consume 50 percent of a display or window on the user's equipment.

**Regarding claim 9**, Henrikson teaches, “a method for communicating at least one primary data stream as defined by claim 1 wherein each of said plurality of real time data streams has an identifier, and wherein said primary selection command includes said identifier corresponding to said primary data stream”, col. 4, lines 49 – 50, The mixed output preferably includes and distinguishes the primary video image.

**Regarding claim 10**, Henrikson teaches, a method for communicating at least one primary data stream as defined by claim 1 wherein each of said plurality of real-time data streams has a unique identifier (distinguisher), and wherein said primary selection command includes said unique identifier corresponding to said at least one primary data stream (primary video image), and wherein the method further includes the step carried out by each of the plurality of attendees of storing said at least one primary data stream

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identifier in a memory after receiving said primary selection command, and of using said stored primary stream identifier to recognize said at least one primary data stream", col. 4, lines 45 – 50, In the preferred embodiment, media resource function 124 includes a conference circuit that receives all inputs, including audio and video, from the conference participants and distributes a mixed output to all conference participants. The mixed output preferably includes and distinguishes the primary video image.

**Regarding claim 11**, Jang teaches, "a method for communicating at least one primary data stream as defined by claim 1 wherein the plurality of real time data streams communicated from each of said plurality of attendees includes a plurality of real time video streams and at least one real time audio stream, and wherein said primary selection command designates at least one of said plurality of real time video streams from at least one of said plurality of attendees" col. 4, lines 53 – 58, the central processing hub provides a gateway function whereby remote users can communicate across different network boundaries.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson's system by adding command and control functionality as taught by Jang for the purpose of selectively displaying the desired data.

**Regarding claim 12**, Henrikson teaches, method for communicating at least one primary data stream as defined by claim 1 and further including the step of enforcing one or more rules that define where said primary selection command may be communicated from", col. 4, lines 9 – 12, FIG. 1. These apparatus include one or more

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processors that execute programs to implement the functionality described herein and generally associated with third generation wireless systems.

**Regarding claim 13**, Jang teaches, “a method for communicating at least one primary data stream as defined by claim 12 wherein said at least one rule calls for said primary selection command to be generated only from a designated one of said plurality of attendees; said at least one rule also allowing for said designated attendee to be changed to a different of said plurality of attendees”, col. 4, lines 53 – 58, the central processing hub provides a gateway function whereby remote users can communicate across different network boundaries.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson’s system by adding command and control functionality as taught by Jang for the purpose of selectively displaying the desired data.

**Regarding claim 14**, Jang teaches, “a method for communicating at least one primary data stream as defined by claim 1 wherein said primary selection command is communicated from a source connected to the other than said plurality of attendees, and wherein said at least a portion of said plurality of attendees is all of said plurality of attendees”, col. 4, lines 53 – 58, the central processing hub provides a gateway function whereby remote users can communicate across different network boundaries.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson’s system by adding command and control functionality as taught by Jang for the purpose of selectively displaying the desired data.



**Regarding claim 15**, Henrikson teaches, "a method for communicating at least one primary data stream as defined by claim 1 wherein said primary selection command is communicated from a meeting facilitator (processor) connected to the network, said meeting facilitator monitoring all of said plurality of data streams but not communicating a video or audio data stream to said plurality of attendees, and wherein said at least a portion of said plurality of attendees is all of said plurality of attendees", col. 4, lines 66-67 and col. 5, lines 1 – 2, In accordance with the present invention, the audio packets received from conference participants are analyzed to select the primary video image for display.

**Regarding claim 16**, Henrikson teaches "a method for communicating at least one primary data stream as defined by claim 1 wherein said primary selection command includes a first primary selection command, and wherein the method further includes the step of communicating a second primary selection command to at least a portion of said plurality of attendees, said second primary selection command causing said at least one primary stream to be replaced by at least one second primary stream identified in said second primary selection command", col. 4, lines 59- 67 and col. 5, lines 1 – 2, In accordance with the present invention, the audio packets received from conference participants are analyzed to select the primary video image for display.

**Regarding claim 17**, Henrikson teaches, a method for communicating at least one primary data stream as defined by claim 16 wherein said first primary selection command is communicated from a first of said plurality of attendees to all others of said plurality of attendees, and wherein said second primary selection command is

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communicated from a second of said plurality of attendees to all others of said plurality of attendees", col. 6, lines 8 – 18, a primary video image for a multimedia conference call it is selected. Advantageously, a 10 simple count of audio data or packets is used as a first measure to determine the primary video image. Complex loudness and volume analysis of the audio signals from participants may be used where the count of audio data or packets does not reflect a participant dominating the audio 15 portion of the conference call. When needed, loudness and volume analysis is readily performed. The period of hysteresis prevents inadvertent and undesirable changes in the primary video image.

**Regarding claim 18**, Jang teaches, "a method for communicating at least one primary data stream as defined by claim 1 wherein said plurality of attendees are a plurality of conference rooms participating in a virtual meeting, each of said conference rooms having a plurality of cameras that each generate a real time video signal and at least one microphone that generates a real time audio signal, and wherein said at least one primary data stream includes at least one video data stream", col. 8, lines 32 – 38, each remote user terminal 14 will have a camera or cameras, or other video sources, and a video monitor or TV screen. Microphone or other audio sources will be employed, and speakers or headphones will be provided for each conference participant to hear the returned audio signal, which is sent to each respective user terminal 14.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson's systems by providing each user a headphone and camera for the purpose of free mobility more flexibility.

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**Regarding claim 19**, Henrikson in his Mixing video signals for an audio and video multimedia conference call teaches:

carried out by a first of the plurality of attendees:

However, Henrikson teaches, “selecting at least one of said plurality of real time data video streams as a primary data stream, communicating a primary selection command identifying said at least one primary data stream to all others of the plurality of attendees”, col. 5, lines 20 - 24, a particular participant is dominating the audio portion of the conference (206), then the primary video image that is sent to all participants is selected based on the participant dominating the audio portion of the conference call (208).

carried out by all others of the plurality of attendees:

Henrikson further teaches, “receiving said plurality of real time data streams communicated from the first of the attendees, receiving said primary selection command communicated from the first of the attendees, using said primary selection command to recognize said primary data stream, and displaying said primary data stream in a highlighted manner”, col. 4, lines 33 – 35, the primary video image is the same size as the secondary video images, but is otherwise highlighted or distinguished for the user.

Jang teaches, “communicating a plurality of real time data streams to all others of the plurality of attendees, said plurality of real time data streams including at least one video data stream and at least one audio data stream (Col. 12, lines 28 – 30, in any event, the media processor card functions in real-time, to provide real-time processing of video and audio signals).

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Jang does not specifically teach “selecting at least one of said plurality of real time data video streams as a primary data stream, communicating a primary selection command identifying said at least one primary data stream to all others of the plurality of attendees”.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson's systems by transmitting and receiving data in real time as taught by Jang for the purpose of timely interaction between the attendees and further to indicate some how which one of the data is the dominant at that time.

**Regarding claim 20**, Henrikson in his Mixing video signals for an audio and video multimedia conference call teaches:

Henrikson teaches, “identify at least one of said plurality of real time data streams as a primary data stream, communicate a first primary stream identification to said plurality of attendees, said first primary stream identification command identifying at least one of said first plurality of real time data streams as a first primary data stream”, col. 4, lines 49 – 52 the mixed output preferably includes and distinguishes the primary video image. Most preferably, media resource function 124 receives audio, video and other packets from the conference participants.

Henrikson teaches, “receive a second plurality of real time data streams from said plurality of attendees, said second plurality of real time data streams including at least one video data stream and at least one audio data stream”, col. 4, lines 27 – 35, most preferably, the primary video image is most prominently displayed, while secondary video images are less prominently displayed. For example, a primary video

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image may consume 50 percent of a display or window on the user's equipment and the secondary video images may share the remaining 50 percent of the display or window. Alternatively, the primary video image is the same size as the secondary video images, but is otherwise highlighted or distinguished for the user,

Henrikson teaches, "receive a second primary stream identification command from at least one of said plurality of attendees", col. 4, lines 49 – 52 the mixed output preferably includes and distinguishes the primary video image. Most preferably, media resource function 124 receives audio, video and other packets from the conference participants".

Henrikson teaches, "use said second primary stream identification command to identify at least one second primary data stream from said second plurality of real time data streams", col. 4, lines 49 – 52 The mixed output preferably includes and distinguishes the primary video image. Most preferably, media resource function 124 receives audio, video and other packets from the conference participants.

Henrikson does not specifically teach communicate a first plurality of real time data streams to a plurality of attendees connected to the communications network, said first plurality of real time data streams including at least one video data stream and at least one audio data stream"

However, Jang teaches, communicate a first plurality of real time data streams to a plurality of attendees connected to the communications network, said first plurality of real time data streams including at least one video data stream and at least one audio

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data stream", col. 4, lines 53 – 58, the central processing hub provides a gateway function whereby remote users can communicate across different network boundaries.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Henrikson's systems by transmitting and receiving data in real time as taught by Jang for the purpose of timely interaction between the attendees.

**Regarding claim 21**, Henrikson teaches, one-second primary data stream is a real time video data stream, and displaying the second primary stream however, the examiner takes Official Notice that highlighting any icon or image while another one is functioning is well known in the art.

**The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

**Kantor et al. US Patent No. 5,938,724** teach User interface for a video conferencing system.

**Memhard et al. US Patent No. 6,201,859** teaches Method and apparatus for controlling participant input in conferencing environment.

**Butler US Patent No. 6,584,493** teaches, multiparty conferencing and collaboration system utilizing a per-host model command, control and communication structure.

**Shaffer et al. US Patent No. 6,775,247** teaches (Reducing multipoint conferencing bandwidth).

**MeLampy et al. US Patent No. 7, 002, 973, teaches**, (A system for assisting in controlling real-time transport protocol flow through multiple networks via use of a cluster of session routers).

**MeLampy et al. US Patent NO. 7,133,923**, teaches, (A system for assisting in

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controlling real-time transport protocol flow through multiple networks via screening).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassen A. Mia whose telephone number is 571-272-9749. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST alt. Friday off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HM

  
BRIAN PENDLETON  
SUPERVISORY PATENT EXAMINER